# MACH LED PLUS.seventy MACH LED PLUS.forty

MACH LED PLUS linear LED machine light is available in two diameters: 70mm and 40mm

## MACH LED PLUS. forty

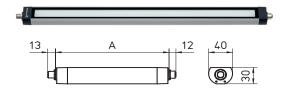
## 40MM LINEAR LED MACHINE LIGHT

### FEATURES:

- Four lengths: 7.5" (190mm), 14.4" (365mm), 21.3" (540mm), 28.2" (715mm)
- Beam angle option: 40° (optics) or 90° (reflector)
- Rugged anodized aluminum housing and 4mm thick safety glass
- Various bracket options for simple installation
- Able to withstand extreme ambient heat up to 122°F
- 60,000 hours of maintenance-free LED service life
- Vibration resistant up to 55Hz (amplitude 0.35mm); Shock resistant up to .11 lb
- Protection rating IP67
- Easy connection via M12 connector with cord, A-coded
- Designed for use with coolants and lubricants

### SPECIFICATIONS:

Voltage 24V DC Lamping LED 5000K Color Temperature Color Rendering Index (CRI) 40° or 90° Beam Angle Luminaire Material anodized aluminum Lens Material borosilicate safety glass Dimension 4 lengths, 1.6" (40mm) diameter IP67 Protection Rating Certification CE, ETL/cETL approved Connection M12 connector with 16' cord included See page 66 Mounting and accessories



See chart for individual lengths (A) Measurements in millimeters

Waldmann has combined the positive attributes of MACH LED PLUS with the small form factor of the very popular MACH LED to develop MACH LED PLUS.forty – 1.5" in diameter with light output extending the full length of the fixture. Available with a choice of beam angle, with more lumens per watt than MACH LED and an even longer LED life – 60,000 hours of maintenance-free operation.

MACH LED PLUS.forty is available with either 40° or 90° angle of illumination to enable optimum lighting for many visual tasks. MACH LED PLUS.forty reflects state-of-the-art technology: the latest LED technology, specially developed optics system and the most modern housing concept by Waldmann Lighting.

Machine

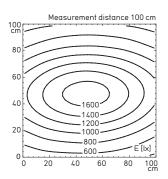




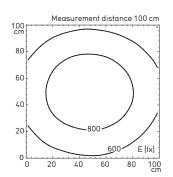
MACH LED PLUS.forty with angle of illumination 40°



MACH LED PLUS.forty with angle of illumination  $90^{\circ}$ 



Illuminance taking MLAL 57 S with 40° optics as an example



Illuminance taking MLAL 57 S with 90° reflector as an example

ORDERING INFORMATION	N (No operating device included, which is only required for 120-277V operation)				
Version	Wattage	Length (A)	Lumens	Model	Part #
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24V Versions	=,,,				
90° beam angle	5W	7.5" (190mm)	480	MLAL 12 S	113 161 000 - 006 625 75
40° beam angle	5W	7.5" (190mm)	490	MLAL 12 S	113 161 000 - 006 600 33
90° beam, thru-wire	5W	7.5" (190mm)	480	MLAL 12 SD	113 161 000 - 006 626 00
90° beam angle	10.5W	14.4" (365mm)	1080	MLAL 27 S	113 162 000 - 006 626 85
40° beam angle	10.5W	14.4" (365mm)	1120	MLAL 27 S	113 162 000 - 006 606 81
90° beam, thru-wire	10.5W	14.4" (365mm)	1080	MLAL 27 SD	113 162 000 - 006 627 06
90° beam angle	16W	21.3" (540mm)	1680	MLAL 42 S	113 163 000 - 006 627 17
40° beam angle	16W	21.3" (540mm)	1720	MLAL 42 S	113 163 000 - 006 606 84
90° beam, thru-wire	16W	21.3" (540mm)	1680	MLAL 42 SD	113 163 000 - 006 627 35
90° beam angle	21.5W	28.2" (715mm)	2280	MLAL 57 S	113 164 000 - 006 628 06
40° beam angle	21.5W	28.2" (715mm)	2330	MLAL 57 S	113 164 000 - 006 606 87
90° beam, thru-wire	21.5W	28.2" (715mm)	2280	MLAL 57 SD	113 164 000 - 006 628 33
External Operating Devices	Max. Wattage		Input	Output	Part #
Required for 120-277V operation	17W		120-277V, 50/60Hz	24V DC	209 585 028
	20W		120-240V, 50/60Hz	24V DC	309 537 010 - 006 704 53
	50W		120V, 50/60Hz	24V DC	209 585 030
	75W		120-277V, 50/60Hz	24V DC	209 585 031
	100VV		120-277V, 50/60Hz	24V DC	309 538 010 - 006 704 56
Mounting Options	Item		Unit		Part #
	End bracket set,	nd bracket set, +/- 90°			408 001 403 - 006 716 26
Clip bracket, adjustable, +/- 20°		stable, +/- 20°	Sold separately		408 001 402 - 006 716 23
Accessories*	Item		Туре	Voltage	Part #
	M12 connector with 16' cord (included), straight		A-coded	24V DC	US0 009 001
M12 connector with 16' cord (included), as			A-coded	24V DC	US0 009 011